



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,978	12/28/2001	Charles Brandenburg	CL1724 US NA	8691
23906	7590	05/12/2004	EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			WYROZEBSKI LEE, KATARZYNA I	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/032,978	BRANDENBURG ET AL. <i>eb</i>	
	Examiner	Art Unit	
	Katarzyna Wyrozewski	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-12,14,16-18,20,22-24,26,28-30,32,34-36,38 and 40-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-12,14,16-18,20,22-24,26,28-30,32,34-36,38 and 40-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Upon careful reconsideration of the prior art of record the examiner realized that the prior art rejection was reversed. The examiner intended to write rejection of in form of SCHWIND in view of MOORMAN. Since such change is considered as new grounds for rejection this office action is non-final. Claims 1, 3, 5-12, 14, 16-18, 20, 22-24, 26, 28-30, 32, 34-36, 38 and 40-45 are pending.

Election/Restrictions

The election restriction posed on claims as stated in the first office action on the merits is not changed and it is incorporated here by reference.

The examiner acknowledges applicant's election of Groups I claims 1, 3, 5-12, 14, 16-18, 20, 22-24, 26, 28-30, 32, 34-36, 38 and 40-45 with traverse. Applicants have cancelled non-elected claims of Group II.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3, 5-12, 14, 16-18, 20, 22-24, 26, 28-30, 32, 34-36, 38, 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHWIND (US 5,880,235) in view of MOORMAN (US 5,319,014).

The polymer of the prior art of SCHWIND is copolymer of exo-methylene lactam with free-radical polymerizable vinyl monomer. Preferred lactones in the composition of SCHWIND are alpha-methylene-butyrolactones listed in col. 6. The co-monomers include acrylic type monomers such as acrylic esters, acrylic acids and styrene (col. 9, lines 35-48). The most preferred co-polymers are those comprising alpha-methylene butyrolactone with meth(acrylates) because they also have higher thermal resistance (col. 10, lines 25-28).

With respect to the anti-microbial property of the composition, it is well know (see, for example US 5,248,221 provided herewith) that the anti-fouling and thereby anti-microbial properties are the property of compounds such as alpha methylene butyrolactone. Therefore the composition will also be anti-microbial.

The composition of SCHWIND is usable in molding compositions that are produced by injection molding or extrusion (col. 11, lines 59-63). Resulting composition will have improved scratch resistance and improved thermal dimensional stability (col. 11, lines 56-58 and col. 26, lines 12-15).

The difference between the prior art of SCHWIND and the present invention is recitation of the filler.

With respect to the above argument, the prior art of MOORMAN also discloses composition, that would have improved scratch resistance and utilizes molding to produce the articles.

The polymer of MOORMAN is also polymerized from vinyl monomers such as methacrylates and is polymerized in presence of finely divided inorganic filler (ABSTRACT).

The examples of MOORMAN disclose use of alumina trihydrate or silver with organophilic clay as the filler component in order to make articles such as sinks (example 4), bowls (example 1), countertops (example 5) and bath tub (example 7).

Filler according to the Abstract of MOORMAN is utilized in amount of 20-70 by volume, and the examples further disclose 63 pbw (ex 3) of alumina trihydrate

Addition of alumina trihydrate or other fillers to molding composition does not impair the scratch resistance of the composition. Selection of a known material based on its suitability for its intended use supports *prima facie* obviousness. *Sinclair & Carroll Co vs. Interchemical Corp.* 325 U.S. 327, 65 USPQ 297 (1945).

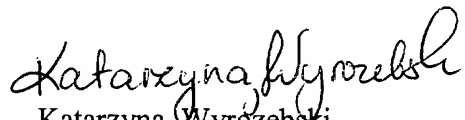
In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize fillers of MOORMAN in the composition of SCHWIND and still obtain composition having scratch resistant properties.

In view of the changed rejections applicant's arguments are considered moot, since they do not address the rejection as it is restated in this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Katarzyna Wyrózebski
Primary Examiner
Art Unit 1714

May 10, 2004